



DELHI METRO RAIL CORPORATION LIMITED
KOCHI METRO RAIL PROJECT-PREPARATORY WORK

“RE-BUILDING OF ROB No. 213A TO FOUR LANES WITH METRO STRUCTURE INCLUDING APPROACHES AT KM 104/5-6 NEAR ERNAKULAM TOWN RAILWAY STATION BETWEEN ERNAKULAM TOWN AND ERNAKULAM JUNCTION RAILWAY STATIONS”

CONTRACT NO: KOCHI – ROB/ERN

TENDER DOCUMENTS

VOLUME 1

NOTICE INVITING TENDER

INSTRUCTION TO TENDERERS

SPECIAL CONDITIONS OF CONTRACT

DELHI METRO RAIL CORPORATION LTD.
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NOTICE INVITING TENDER

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NOTICE INVITING TENDER (NIT)**1.1 GENERAL****1.1.1 Name of Work :**

Delhi Metro Rail Corporation (DMRC) Ltd. invites sealed tenders from eligible applicants, who fulfill qualification criteria as stipulated in clause 1.1.3 of NIT, for the work, “**Re-Building of ROB No. 213A to Four Lanes with Metro Structure Including Approaches At Km 104/5-6 Near Ernakulam Town Railway Station Between Ernakulam Town And Ernakulam Junction Railway Stations**”. The brief scope of the work and site information is provided in clause 2.0 & 3.0 respectively.

1.1.2 Key details :

Approximate cost of work	Rs. 48.80 Crores
Tender Security amount	Rs. 48.80 Lakhs
Completion period of the Work	18 (Eighteen) Months
Tender documents on sale	From 19/01/2011 to 05/02/2011 (between 09:00 Hrs to 17:30 Hrs) on working days
Cost of Tender documents	Rs. 21,000/- (inclusive of 5% VAT) (Demand Draft in favour of “Delhi Metro Rail Corporation Ltd”) payable at New Delhi.
Last date of Seeking Clarification	09/02/2011
Pre-bid Meeting	09/02/2011 at 14:00 Hrs.
Last date of issuing addendum	14/02/2011
Date & time of Submission of Tender	24/02/2011 (up to 15.00 hrs)
Date & time of opening of Tender	24/02/2011 at 15:05 hrs
Authority and place for purchase of tender documents, seeking clarifications, Pre-bid meeting and submission of completed tender documents & opening of tender	Project Director (DMRC-Kochi Metro), Delhi Metro Rail Corporation Limited, 2 nd Floor, GCDA Eastern Entry Tower, Ernakulam South Railway Station, Kochi-682 016

1.1.3 QUALIFICATION CRITERIA :**1.1.3.1 Eligible Applicants :**

- i. The tenders for this contract will be considered only from those tenderers (proprietorship firms, partnerships firms, companies, corporations, consortia or joint ventures) who meet requisite eligibility criteria prescribed in the sub-clauses of clause 1.1.3 of NIT. In the case of a JV or Consortium, all members of the Group shall be jointly and severally liable for the performance of whole contract.

- ii. A non-Indian firm is permitted to tender only in a consortium arrangement or Joint Venture with their wholly owned Indian subsidiary registered in India under Companies Act -1956 or any other Indian firm having minimum participation interest of 26%.
- iii. Tenderers shall not have a conflict of interest. All Tenderers found to have a conflict of interest in this tender process shall be disqualified. Tenderers shall be considered to have a conflict of interest, if:
 - (a) One firm applies for tender both as an individual firm and in a Group.
 - (b) If Tenderers in two different applications have controlling shareholders in common.
 - (c) Submit more than one application in this tender process.
 - (d) If the Tenderer has participated as a consultant in the preparation of the design or technical specifications of the works that are the subject of this tender.
- iv. A firm, who has purchased the tender document in their name, can submit the tender either as individual firm or in joint venture/Consortium.
- v. Tenderer must not have been blacklisted or deregistered by any central / state government department or public sector undertaking. Also no work of the tenderer must have been rescinded by client after award of contract during last 10 years. The tenderer should submit undertaking to this effect in Performa of **Annexure-4**.

1.1.3.2 Minimum Eligibility Criteria :

A. Work Experience: The tenderers will be qualified only if they have completed work(s) during last five years ending **31.01.2011** as given below:

- (i) At least one single work of “**Road Over Bridge (ROB)/ Bridges having Construction Span not less than 30m or Metro Structure**” of value of **Rs 39.00 crores or above**.
- (ii) At least Two single work of “**Road Over Bridge (ROB)/ Bridges having Construction Span not less than 30m or Metro Structure**” of value of **Rs 24.40 crores or above**.
- (iii) At least Three single work of “**Road Over Bridge (ROB)/ Bridges having Construction Span not less than 30m or Metro Structure**” of value of **Rs 19.50 crores or above**.

Notes:

- The tenderer shall submit details of work executed by them in the Performa of **Annexure-1** for the works to be considered for qualification of work experience criteria. Documentary proof such as completion certificates from client clearly indicating the nature/scope of work, actual completion cost and actual date of completion for such work should be submitted. ***The offers submitted without this documentary proof shall be summarily rejected. In case the work is executed for private client, copy of work order, bill of quantities, bill wise details of payment received certified by C.A., T.D.S certificates for all payments received and copy***

of final/last bill paid by client shall be submitted.

- Value of successfully completed portion of any ongoing work up to **31.01.2011** will also be considered for qualification of work experience criteria.
- For completed works, value of work done shall be updated to **31.01.2011** price level assuming 5% inflation for Indian Rupees every year and 2% for foreign currency portions per year.
- In case of joint venture / consortia, full value the work, if done by the same joint venture or any of members of the Joint Venture shall be considered. However, if the work done by them in JV/consortium, value of work as per his percentage participation shall be considered.

B. Financial Standing: The tenderers will be qualified only if have minimum financial capabilities as below:

- T₁ – Working Capital** (Liquidity and Bankers References) : Working Capital (Net Cash Flow) of the tenderer during last audited financial year should be **≥ Rs. 4.65 crores**
- T₂ - Profitability:** Profit before Tax should be Positive in at least (one) year, out of the last three audited financial years.
- T₃ – Net Worth:** Net Worth of tenderer during last audited financial year should be **≥ Rs.6.51 crores**
- T₄ - Annual Turnover:** The average annual turn over from construction of latest last three financial years should be **> Rs.26.03 crores**.

Notes :

- Financial data for latest last three audited financial years has to be submitted by the tenderer in **Annexure-2** along with audited balance sheets. The financial data in the prescribed format shall be certified by Chartered Accountant with his stamp and signature. In case audited balance sheet of the last financial year is not made available by the bidder, he has to submit an affidavit certifying that ‘the balance sheet has actually not been audited so far’. In such a case the financial data of previous ‘3’ audited financial years will be taken into consideration for evaluation. If audited balance sheet of any other year than the last year is not submitted, the tender will be considered as non-responsive.
- In case of Joint Venture / Consortia, the financial standing criteria will be evaluated based on weighted average of the financial data of the members as per their percentage participation.

1.1.3.3 Bid Capacity Criteria :

Bid Capacity: The tenderers will be qualified only if their available bid capacity is more

than the approximate cost of work as per NIT. Available bid capacity will be calculated based on the following formula:

$$\text{Available Bid Capacity} = 2 \cdot A \cdot N - B$$

Where,

A = Maximum of the value of construction works executed in any one year during the latest last five financial years (updated to 31.03.2010 price level assuming 5% inflation for Indian Rupees every year and 2% for foreign currency portions per year).

N = No. of years prescribed for completion of the work

B = Value of existing commitments (as on **31.01.2011**) for on-going construction works during period of **18 months** w.e.f. **01.02.2011**.

Notes :

- Financial data for latest last five financial years has to be submitted by the tenderer in **Annexure-3A** along with audited financial statements. The financial data in the prescribed format shall be certified by the Chartered Accountant with his stamp and signature.
- Value of existing commitments for on-going construction works during period of **18 months** w.e.f. **01.02.2011** has to be submitted by the tenderer in **Annexure-3B**. These data shall be certified by the Chartered Accountant with his stamp and signature.
- In the case of joint venture / consortia, bid capacity of each member will be computed applying above formula and combined bid capacity of the joint venture / consortia will be weighted average of the individual bid capacity of the members as per their percentage share in the joint venture / consortia.

1.1.3.4 The tender submission of tenderers, who do not qualify the *minimum eligibility criteria* & bid capacity criteria stipulated in the clauses 1.1.3.2 to 1.1.3.3 above, shall not be considered for further evaluation and therefore rejected. The mere fact that the tenderer is qualified as mentioned in sub clause 1.1.3.2 to 1.1.3.3 shall not imply that his bid shall automatically be accepted. The same should contain all technical data as required for consideration of tender prescribed in the ITT.

1.1.4 **The Tender documents consist of :**

Volume 1

- Notice Inviting Tender (NIT)
- Instructions to Tenderers (ITT)
- Special Conditions of Contract (SCC)

Volume 2

- Technical Specifications
- Structural Specifications

- Employer Requirement
- Employer Requirement-Appendices
- Tender Drawings

Volume 3

- Bill of Quantities (BOQ)

Following two documents, even though not attached as a part of tender document, will form integral part of the tender. These documents will form integral part of contract agreement also. The work is to be carried out in accordance with GCC and all provisions contained in the Conditions of Contract on SHE shall be strictly followed. These documents can be purchased separately from DMRC. The tenderers while quoting their rates must carefully consider all the requirements of these documents:

- i. **General Conditions of Contract (Build Only And Part Design & Build Only Contracts)**
- ii. **Conditions of Contract on Safety, Health & Environment (SHE) Ver 1.2.**

- 1.1.5 The contract shall be governed by the documents listed in para 1.1.4 above along with latest edition of CPWD Specification, IRS Specifications & MORTH Specifications. These may be purchased from the market.
- 1.1.6 The tenderers may obtain further information, if any, in respect of these tender documents from the office of the Project Director (DMRC-Kochi Metro), Delhi Metro Rail Corporation Ltd., 2nd Floor, GCDA Eastern Entry Tower, Ernakulam South Rly. Station, Kochi-682016 **OR** Chief Engineer (Tender), Delhi Metro Rail Corporation Ltd., 5th floor, Metro Bhawan, Fire Brigade Lane, Barakhamba Road, New Delhi –110 001.
- 1.1.7 All tenderers are hereby cautioned that tenders containing any material deviation or reservations as described in Clause 24.0 of “Instructions to Tenderers” and/or minor deviation without quoting the cost of withdrawal shall be considered as non-responsive and is liable to be rejected.
- 1.1.8 Late tenders (received after date and time of submission of bid) shall not be accepted under any circumstances.
- 1.1.9 The Tenderer should confirm and declare in the tender submittal (in Performa of **Annexure-5**) that they, or any associate, have not engaged in any fraudulent and corrupt practice as defined in Clause 5.0 of the General Conditions of Contract and that no agent, middleman or any intermediary has been, or will be, engaged to provide any services, or any other items of work related to the award and performance of this contract.
- 1.1.10 Tenders shall be valid for a period of **120 days** from the date of submission of Tenders and shall be accompanied with a tender security of the requisite amount as per form B in the form of a Bank Guarantee from Scheduled Commercial Bank in India.
- 1.1.11 DMRC reserves the right to accept or reject any or all proposals without assigning any reasons, No tenderer shall have any cause of action or claim against the DMRC for rejection of his proposal.

Chief Engineer (Tender)
Delhi Metro Rail Corporation Ltd.

SCOPE OF WORK

2.0 GENERAL

The scope of work “**Re-Building of ROB No. 213A to Four Lanes with Metro Structure Including Approaches At Km 104/5-6 Near Ernakulam Town Railway Station Between Ernakulam Town And Ernakulam Junction Railway Stations**”, comprises of Construction, completion, Testing & Commissioning of the Permanent works by the contractor (Including without limitation the construction & removal of the temporary works) and the rectification of defects appearing in Permanent Works in the manner and to the standards and within the time stipulated by the Contract. In full recognition of this objective, and with full acceptance of the obligations, liabilities and risks which may be involved, the Contractor shall undertake the execution of the Works. The Scope of work of this contract is further described in Employer Requirements, Volume 2 of Tender Document.

2.1 WORK CONTENTS

2.1.1 Brief Scope

The work mainly comprises of but not limiting to the following:

1. Road Over Bridge and Foot Over Bridge
 - a) Piles, Pilecaps, Piers, Pier heads, bearing pedestals, bearings etc.
 - b) Fabrication of Steel Girders for Railway span and FOB
 - c) Launching of Steel Girders for Railway span and FOB and decking
 - d) RCC T-beam & slab for approaches
 - e) Parapet and handrails etc.
 - f) RCC retaining wall, earthwork, road work etc. for approach ramp
 - g) Regarding of Junctions, Feeder roads, construction of service road, drain etc.
 - h) Providing lighting in the ROB, approaches and road etc.
2. Metro Structure
 - a) Pile, Pilecap, Pier, Pier head, bearing pedestal, bearings etc.
 - b) Casting of PSC I Girders of 34m span over the Railway track
 - c) Casting of PSC I Girders of 25m span for the approaches
 - d) Launching of PSC I Girders 34m span over Railway track and 25m span for the approaches
 - e) Parapet and handrails etc.
 - f) Providing lighting arrangements
3. The scope of work shall include detailed survey of the alignment for the ROB (including Approaches & Bridge portion etc.), soil investigation, and construction of following

components of ROB and related works including preparation and submission of temporary arrangement drawings and necessary assistance for getting the design and drawing approved by CBE (Southern Railway) / CRS (Bangalore).

- i. Pile foundations with hydraulic rotary piling rigs.
 - ii. Pile foundations with socketting in rock of any type.
 - iii. Liner for pile.
 - iv. Pile caps including leveling course.
 - v. Piers and pier heads as per the standard shape and finishes
 - vi. Piles, Pilecaps, Piers, Pier Heads, Bearing pedestals etc. of Metro Structure.
 - vii. Elastomeric bearings including provision of bearing pedestals, seismic devices.
 - viii. In situ parapet as per Railway standard and railing, if any, as per design.
 - ix. Cable ducts & covers. The top of duct cover should have proper neat cement finish.
 - x. Expansion joint, sealant in the expansion joints of ramp walls.
 - xi. Man holes with manhole covers.
 - xii. Earthing arrangement, drainage system (only GI Pipes of sufficient dia of heavy class is to be provided for drainage purpose) at all locations, water collecting boxes at the pier location & its operable cover made up of mesh/jali.
 - xiii. Provision of permanent lighting arrangements
 - xiv. Construction for ground water recharging/Rain harvesting.
 - xv. Special spans arrangements
 - xvi. Detailed survey of the alignment and other connected work for execution of the work as shown in the tender drawings.
 - xvii. Approved grooves on the parapet and pier.
4. Dismantling of existing Road Over Bridge, Light Vehicle Path and foundations wherever required in stages. The contractor has to use Diamond Core Drilling, Diamond Floor Sawing, Diamond Wall Sawing, Diamond Wire Sawing, Hydraulic Bursting/ Splitting, Hydraulic hand sawing and other equipment as required for dismantling the existing ROB
5. There is possibility of some of the items not getting mentioned in the above list of works in ROB/ Metro Structure. Contractors are requested to go through the tender drawings also in details as the works mentioned above as well as indicated in the tender drawings would be considered inclusive in the scope of work. Employer decision shall be final in this regard in case of dispute. Some of the major utilities cannot be diverted. Contractor shall take into consideration the existence of these utilities and the foundation at these locations will be modified accordingly.
6. The scope of works shall include but not limited to the following:
- a. Utility identification at foundation location will be done by the Contractor in advance, excavation for trial pits to locate utility cables etc. and in case utility(s) is encountered or obligatory requirements are to be met out, the Contractor would modify the span configuration at such location out of the standard spans configuration provided in the tender drawing to save the utility(ies) or to meet the obligatory requirements within the accepted price. The shifting of the utility(ies) would be undertaken only in exceptional circumstances where in the opinion of the Engineer no other option is available. Cost of such utility shifting will be paid

separately under relevant item of BOQ or will be executed by DMRC directly. No claim as regard to delay in utility diversion will be entertained.

- b. Construction of ramp portion as indicated in GAD drawing.
- c. Site clearance and dismantling of obstructions etc., before commencement of work as specified or as directed;
- d. True and proper setting out and layout of the Works, bench marks and provision of all necessary labour, instruments and appliances in connection therewith as specified or as directed;
- e. Conducting load test on piles as per IS-2911- Part IV and load test of Superstructure of Metro Span.
- f. All aspects of quality assurance, including testing of materials and other components of the work, as specified or as directed;
- g. The Contractor has to ensure cleanliness of the roads and footpaths by deploying man power for the same. The Contractor shall have to ensure proper brooming, cleaning and washing of roads and footpaths on all the times throughout the entire stretch till the currency of the contract including disposal of sweepage. Nothing extra shall be payable on this account;
- h. Day to day cleaning of worksite throughout the execution period.
- i. Clearing of site and handing over of all the Works, as specified or as directed;
- j. Maintenance of the completed Work during the period as specified;
- k. Submission of completion (i.e. 'As-Built') drawings and other related documents as specified;
- l. **Barricading:** The contractor shall have to provide barricading at all the work areas under his scope of work including Temporary works, Construction Depot & Store etc. The Tenderer shall quote his price inclusive of cost of Barricading and other requirements of Safety, Health & Environment as specified in Conditions of Contract on SHE version 1.2. Barricading on both sides of track as per Railway standards to be provided and maintained till the completion of work.
- m. Geotechnical investigation as per relevant IS codes through exploratory bore holes and laboratory tests including mechanical properties of rock, SPT & other characteristics required at every 50m along the alignment be conducted before final design. The spacing of boreholes will be at every pier location wherever the rock met and large variation in soil strata encountered.
- n. Wherever necessary pucca shoring arrangements as directed by the engineer in charge will have to be provided during execution of work to safe guard cutting sides, existing track trench sides etc. and to ensure safe passage of trains, by the contractor at his own cost. No separate payment for this items of work will be paid. While quoting rates , this aspect also be taken into account.
- o. Locations wherever the contractors vehicle have to move close to the track, should be cordoned off with proper barricades of not less than 1.5m height above ground level, consisting of bamboo/causarina poles. These barricades should be provided at a distance of approximately 3.5 m from the centre line of track as

directed by the engineer in charge. The barricading shall be done at contractor's cost. If this barricading, by any chance not provided and/or, not maintained by the contractor, the DMRC will be free to provided the same, for which double the cost as expended by the DMRC, at its discretion, will be recovered from the contractor. Any locations like on bridge locations where barricading need not be done will be indicated by the engineer in charge in writing.

p. Fabrication of composite girder shall be carried out in well equipped workshop on approved template. Composite Girder has to be erected/launched in position during the permitted limited hour's Line block/ Power block. However due to some unavoidable circumstance the Line/Power block may be cancelled without prior notice, may lead to idling of resources, for which no extra payment will be made. Line blocks/Power block permitted during night hour's should be utilised for the same purpose duly providing adequate lighting arrangements by contractor at his own cost.

q. The contractor has to get necessary permission from the Mines and Geological Department or other agencies for transporting the earth to the locations and no extra payment will be made for the same.

2.2 INTERFACE WORKS:

2.2.1 Co-ordination/co-operation with other Contractors & Agencies (External/Internal)

1. The contractor shall cooperate with the other contractors appointed by the employer so that the work proceeds smoothly to the satisfaction of engineer. The contractor shall plan & execute the works with proper interfacing with other contractors.
2. NOC & Approval of schemes of Diversion of Utilities from the concerned regulatory / statutory / Local Authority is the responsibility of the Contractor.
3. The contractor shall attend regular coordination meetings convened by the employer/engineer for interface and adhere to the decisions taken in the meeting.
4. Access will be provided to the staff of the other Contractor appointed by the employer for carrying out their works and bringing materials and equipments at the site. However, the security of materials and Equipments brought at the site will be the responsibility of the respective Contractors.
5. The contractor shall, in carrying out his coordination responsibility, raise in good time and provide sufficient information for the employer to decide on any disagreement with other contractor. If the contractor despite having taken all reasonable efforts cannot resolve such disagreement then the decision of the Engineer shall be final and binding on the contractor.

2.3 DIMENSIONS

- 2.3.1 As regards errors, omissions and discrepancies in Specifications and Drawings, relevant clause of Special Conditions of Contract will apply.
- 2.3.2 The levels, measurements and other information concerning the existing site as shown on the conceptual / layout drawings are believed to be correct, but the Contractor should verify

them for himself and also examine the nature of the ground as no claim or allowance whatsoever will be entertained on account of any errors or omissions in the levels or strata turning out different from what is shown on the drawings.

2.4 ASSOCIATED WORKS

Works to be performed shall also include all general works preparatory to the construction and works of any kind necessary for the due and satisfactory construction, completion and maintenance of the works to the intent and meaning of the drawings adopted and technical specifications, to best Engineering standards and orders that may be issued by the Engineer from time to time, compliance by the agency with all Conditions of Contract, supply of all materials, apparatus, plants, equipment, tools, fuel, water, strutting, timbering, transport, offices, stores, workshop, staff, labour and the provision of proper and sufficient protective works, diversion, temporary fencing, lighting and watching required for the safety of the public and protection of works on adjoining land; first –aid equipment, sanitary accommodation for the staff and workmen, effecting and maintenance of all insurances, the payment of all wages, salaries, fees, royalties, duties or the other charges arising out of the erection of works and the regular clearance of rubbish, clearing up, leaving the site perfect and tidy on completion.

2.5 REFERENCE TO THE STANDARD CODES OF PRACTICE

All Standards, Technical Specifications and Codes of practice referred to shall be the latest editions including all applicable official amendments and revisions. The Contractor shall make available at site all relevant Indian Standard Codes of practice, IRSC & IRC Codes, Railway Manual ,Codes and Specifications as applicable.

2.5.1 Wherever Indian Standards do not cover some particular aspects of design/construction, relevant British German Standards will be referred to. The Contractor shall make available at site such standard codes of practice.

2.5.2 In case of discrepancy among Standard codes of practice, Technical Specifications and provisions in sub clauses in this NIT, the order of precedence will be as below :

- i) Provision in NIT
- ii) Technical Specifications,
- iii) CPWD specifications (In Building Works)/ MORTH specifications (In Road Works)/ Railway Specifications in ROB works.
- iv) Standard Codes of Practice.

In case of discrepancy among Standard Codes of Practice, the order of precedence will be IRS, IRC, IS, BS, DIN.

2.6 WORK AREAS FOR CONSTRUCTION DEPOT & DUMPING AREA

All the work areas (including batching plant, site office, dumping yard, casting yard, construction depot etc.) are to be handed over back to the Employer within 28 days from the date of issue of Taking Over Certificate. All temporary works which are not to remain on the site after the completion of the Works shall be removed prior to completion of the Works or at other times instructed by the Engineer. The site shall be clear and reinstated to the lines and

levels and to the same condition as existed before the Works started except as otherwise stated in the contract at Contractor's own cost. Nothing extra will be paid on this account to the Contractor.

2.6.1 CONSTRUCTION DEPOT

The area to the extent available, at the discretion of DMRC will be allocated to the contractor for his stores, offices & other activities at or near the site. This land shall be made good for such offsite activities as needed by the Contractor at no extra cost to the employer. The land shall be cleared from debris & all structures made by the contractor including, RCC footings and rafts etc. before handing over back to the Employer and final bill shall be released to the contractor after all structures from the construction depot are removed.

Dumping area

2.6.2

The dismantled material from the demolition of existing road over bridge has to be transported & disposed off outside the Railway premises. Land on temporary basis, free of cost will be provided at Mulavukadu by the side of proposed 4 lane road to Container Terminal or any other place with a lead upto 10 Km for dumping debris, excavated earth etc. during the contract period.

2.7 TIME SCHEDULE & MONITORING OF PROGRESS

1. The agency shall submit with the tender "Time Schedule" for completion of various portions of works. This schedule is to be within the overall completion period of 15 Months. The intermediate key-dates as mentioned in **clause 17.0** of 'Special conditions of Contract' are to be indicated specifically in the time schedule and these will have to be achieved. The detailed programme in the form of a quantified bar chart or CPM network shall include all activities starting from design to completion.
2. In compiling its Works Programme and in all subsequent updating and reporting, the Contractor shall make provision for the time required for co-ordinating and completing the design, testing, commissioning and integrated testing of the Works, including, inter alia, design co-ordination periods during which the Contractor shall co-ordinate its design with those of Designated Contractors, the review procedures, determining and complying with the requirements of all Government Departments and all others whose consent, permissions, authority or licence is required prior to the execution of any work.
3. The Contractor shall submit to the Engineer Four copies of a Monthly Progress Report (MPR), describing the progress and current status of the Works. The MPR shall address the matters set out in the Works Programme.
4. The MPR shall be submitted by the end of each calendar month. It shall account for all works actually performed from twenty sixth day of the last month and up to twenty fifth day of the current month
5. A monthly/biweekly meeting to monitor the progress of the project shall be convened

by the Engineer, Contractor's site agent and site agent of all interfacing contractors shall attend the meeting. The Employer may also be present in the meeting.

2.8 TRAFFIC MANAGEMENT

The Contractor shall make the detailed traffic diversion plans in consultation with Kochi Traffic Police. The work is to be executed with proper liaison with Kochi Traffic Police. The contractor shall provide sufficient numbers of Traffic marshals to regulate the traffic. Necessary assistance will be given by DMRC. The scheme should be such that minimum of two lane of traffic on each direction of the road should be available for the smooth flow of traffic. The Contractor should inspect the site. The width of construction barricading for execution of work will be restricted to 8m. However, the same can be increased to 9 to 10 mts. On approval of the Engineer on strong justifiable grounds and that too when there is no major disruption to smooth traffic movement. The Contractor shall also strengthen the road where the diversions are planned by widening, repairing to the road surface etc.

2.9 Scope of work under BOQ items

- 2.9.1 Tree cutting and (or) transplantation along the alignment shall be done by Contractor and hence it is in the scope of this tender. Permission of cutting/transplantation will be arranged by DMRC.
- 2.9.2 Demolition of RCC framed structures, brick masonry buildings including basement etc as existing at site without making damage to adjacent structures, utilities and taking away all the debris and released materials etc.
- 2.9.3 Traffic barricade with blinker, reflective tapes and other necessary traffic signage should be provided wherever required as per detailed plan. Temporary traffic diversion for smooth flow of traffic will be provided during construction including necessary traffic signs, repairs to diverted route/services lanes if required. Traffic marshals shall be deployed for the period of diversion to guide the road users and to avoid traffic congestion. The traffic marshal should wear proper uniform and should have proper light/torch baton. Restoration of diverted route in original condition etc. shall be done by Contractor at his own cost.
- 2.9.4 The shifting of the utility(s) would be undertaken only in exceptional circumstances where in the opinion of the Employer no other option is available. The utilities are to be diverted with proper liaisoning and approval of the utility owning agencies. For the utilities which are not to be diverted proper supporting shall be done to prevent any damage. Contractor shall be paid for diverting the utilities under relevant items of BOQ . No payment shall however be made for supporting and protecting the utilities during course of the work.

2.10 UTILITIES

Utility identification at foundation locations will be done by the contractor. Shifting of utility(ies) would be done only in exceptional cases where in the opinion of the Engineer no other option is available. The contractor has to check the utility at each pier location by actual trenching to the required depth, taking photographs of each utilities and propose the diversion plan with utility owning agencies. The trench is to be suitably barricaded and traffic control during identification. The identification of utilities is to be completed within 2 months

of letter of acceptance. Contractor shall be paid for diverting the utilities under items of BOQ. No payment shall however be made for supporting the utilities during course of work.

The utilities are to be diverted with proper liaison and approval of the utility owning agencies. The utilities which are not to be diverted but require supporting, proper supporting be done so that they are not damaged along their branches. Precautions to be taken while handling the utilities are mentioned as under:

- (i) Utilities must not be damaged at any cost. If due to some or the other reason, mis-happening occurs, it should be rectified immediately by the Contractor at his own cost under intimation of DMRC with proper liasoning of utilities owning agency.
- (ii) Till rectification of the damaged trunk sewers, the Contractor shall arrange substitute arrangement for sewer pumping and its disposal as per directions of Concerned agency The similar arrangement be done for other utility.
- (iii) The manholes of T/Sewers should not be covered under the foundation as these may create hindrances to the annual de-silting/cleaning of sewer lines.
- (iv) Sufficient distance of foundation from outer edge of T/ Sewers be kept in view of further maintenance/Safety of T/Sewers.
- (v) The covers of manholes be saved from heavy machinery movement to avoid any accident/Slippage of malba in manholes etc into the T/Sewers which may cause blockage of lines. In case of damage of manhole cover & frame the same shall be replaced immediately by the Contractor at his own cost.
- (vi) Manholes of the trunk sewer should be kept freely accessible for cleaning and removal of blockages and malba should not be dumped over these manholes.
- (vii) Branch sewer connections which are connected with the trunk sewers should also be taken care of. If the same are damaged, the same should be restored immediately on priority.

These are only indicative for one of the utility. Similarly, necessary precautions which are specified from time to time by the utility owning agencies shall also be followed. The Central verge/footpath furnishings which are to be dismantled be handed over to the concerned department in their stores.

2.11 STRUCTURES

The construction of structures will have to be planned in such a manner that they do not obstruct or interfere with the existing roads/railways and other utilities. Where work is required to be carried out at locations adjacent to such roads/railways, utilities, structures, monuments etc. suitable safety and protection arrangements will have to be ensured for which nothing

extra will be payable. It should be ensured that no damage is caused to any such element and Engineer/ Employer shall be indemnified against such damage at no extra cost.

2.12 TENDER PRICES

The tender price as mentioned in Clause 10.0 of ITT shall include all the above listed Items in the scope of the work (Clause 2.1 to 2.11)

SITE INFORMATION

3.1 Work Site

- 3.1.1** The project site is in Kochi. The location of the work and the general site particulars are shown in the General Arrangements Drawings enclosed in the tender documents.
- 3.1.2** The proposed work falls between Ernakulam Town and Ernakulam Junction Railway Stations of Southern Railway in Trivandrum Division (near Ernakulam North Railway Station)
- 3.1.3** The Contractor shall plan his works keeping in view restriction of approach and availability of space and time.

3.2 GENERAL CLIMATIC CONDITIONS

- 3.2.1** The contractor should acquaint themselves with the climatic conditions of Kochi.

3.3 SEISMIC ZONE

Kochi falls in Seismic Zone III.

ANNEXURE-1**WORK EXPERIENCE****NAME OF THE TENDERER (CONSTITUENT MEMBER IN CASE OF JV/CONSORTIUM):**

1. Name of work	
2. Agreement / contract No.	
3. Client	
4. Scope / Nature of work	
5. Date of start	
6. Stipulated date of completion	
7. Actual date of completion	
8. Total value of work done on completion (up to 31.01.2011 in case of works in progress)	
9. Value of work done of component of similar work as stipulated in NIT clause 1.1.3.2.	
10. Ref to client's completion certificate	

NOTE:

1. Separate Performa shall be used for each work. Details of only similar works prescribed in the minimum eligibility criteria shall be submitted.
2. Only the value of contract as executed by the tenderer / member of the JV/Consortium in his own name should be indicated. Where a work is undertaken by a group, the portion of the contract which is undertaken by the tenderer / member of JV/Consortium should be indicated and the remaining done by the other members of the group be excluded while filling the item no. 9 & 10.
3. All the details should be supported by documentary proof e.g. completion certificates from client and concerned Consultant/Architect otherwise it will not be considered.
4. ***In case the work is executed for private client, copy of work order, bill of quantities, billwise details of payment received certified by C.A., T.D.S certificates for all payments received and copy of final/last bill paid by client shall be submitted.***

ANNEXURE- 2**FINANCIAL DATA**
(FINANCIAL STANDING)NAME OF THE TENDERER (CONSTITUENT
MEMBER IN CASE OF JV/CONSORTIUM) :*(ALL AMOUNTS IN CRORES)*

S. No.	Description	Financial Data for Latest Last 3 Audited Financial Years			
		Year 2006-07	Year 2007-08	Year 2008-09	Year 2009-10
1.	Total Assets				
2.	Current Assets				
3.	Total Liabilities				
4.	Current Liabilities				
5.	Profits Before Taxes				
6.	Profits After Taxes				
7.	Annual Turnover				

NOTE:

1. Separate Performa shall be used for each member in case of JV/Consortium.
2. Attach copies of the audited balance sheets, including all related notes, income statements for the last three audited financial years, as indicated above.
3. All such documents reflect the financial data of the Tenderer or member in case of JV/Consortium, and not that of sister or parent company.
4. The financial data in above prescribed format shall be certified by Chartered Accountant / Company Auditor under his signature & stamp.

ANNEXURE- 3A**FINANCIAL DATA**

(CONSTRUCTION WORK DONE DURING THE LATEST LAST FIVE AUDITED FINANCIAL YEARS)

NAME OF THE TENDERER (CONSTITUENT
MEMBER IN CASE OF JV/CONSORTIUM) :*(All amounts in Rupees in Crores)*

S. No.	DESCRIPTION	Financial Data for Last 5 Audited Financial Years				
		Year 2005-06	Year 2006-07	Year 2007-08	Year 2008-09	Year 2009-10
		I	II	III	IV	V
	Total value of construction work done as per audited financial statements					

NOTE:

1. Separate Performa shall be used for each member in case of JV/Consortium.
2. Attach attested copies of the Audited Financial Statements of the last five financial years as Annexure.
3. All such documents reflect the financial data of the tenderer or member in case of JV/Consortium, and not that of sister or parent company.
4. The financial data in above prescribed format shall be certified by Chartered Accountant / Company Auditor under his signature & stamp.
5. The above financial data will be updated to **31.03.2010** price level assuming 5% inflation for Indian Rupees every year and 2% for foreign currency portions per year.

ANNEXURE- 3B**FINANCIAL DATA****(EXISTING COMMITMENTS FOR ON-GOING CONSTRUCTION WORKS)**

NAME OF THE TENDERER (CONSTITUENT MEMBER IN CASE OF JV/CONSORTIUM) :

(All amounts in Rupees in Crores)

Name and brief particulars of contracts for ongoing construction works	Contract Value	Value of balance work yet to be done (as on 31.01.2011)	Estimated Completion Date	Value of existing commitments for on-going construction works during period 18 months w.e.f 01.02.11)		
				2011-12 (1 st Feb'11 to 31 st Mar'11)	2011-12 (1 st Apr'11 to 31 st Mar'12)	2012-13 (1 st Apr'12 to 30 th Jun'12)
1	2	3	4	5	7	8
TOTAL (FOR ALL ONGOING WORKS)						

NOTE:

1. Separate Performa shall be used for each member in case of JV/Consortium.
2. Tenderer or member in case of JV/Consortium should provide information on their current commitments for all contracts that have been awarded or for which a letter of intent or acceptance has been received or for contracts approaching completion but for which a completion certificate is yet to be issued even if completion of such works spills over beyond completion period of this contract.
3. The financial data in above prescribed format shall be certified by Chartered Accountant / Company Auditor under his signature & stamp.

ANNEXURE- 4

UNDERTAKING FOR NOT BLACKLISTED

We do hereby undertake that we have not been blacklisted or deregistered by any central / state government department or public sector undertaking and also that none of our work was rescinded by the client after award of contract during last 10 years.

STAMP & SIGNATURE OF AUTHORIZED SIGNATORY

NOTE:

1. In case of JV/Consortium, the undertaking shall be submitted by each member of the JV/Consortium.
2. The undertaking shall be signed by authorized signatory of the tenderer or constituent member in case of JV/Consortium.

ANNEXURE- 5

UNDERTAKING FOR CORRUPT & FRAUDULANT PRACTICE

It is confirmed and declared that we, or any of our associate, have not been engaged in any fraudulent and corrupt practice as defined in Clause 5.0 of the General Conditions of Contract and that no agent, middleman or any intermediary has been, or will be, engaged to provide any services, or any other items of work related to the award and performance of this contract

STAMP & SIGNATURE OF AUTHORIZED SIGNATORY

NOTE:

1. In case of JV/Consortium, the undertaking shall be submitted by each member of the JV/Consortium.
2. The undertaking shall be signed by authorized signatory of the tenderer or constituent member in case of JV/Consortium.